

# Midstream Changes and Corrections

In the 50 years since the regional laboratories began, they have been subjected to more than a few reorganizations, reviews, studies, examinations, and changes in direction. These have reflected changes in the agricultural and international situation, plans to increase governmental efficiency and effectiveness, and differing views among scientific and political leaders on proper goals for Federal research. The laboratories have, after all, carried out their work with public funds under 10 different administrations.

In their early years, the laboratories formed part of the Bureau of Agricultural and Industrial Chemistry, one of several scientific bureaus within the Department of Agriculture. On November 2, 1953, as part of a sweeping reorganization of USDA, the functions of the Bureau were transferred to a new agency, the Agricultural Research Service (ARS). Other scientific bureaus in the Department also disappeared as organizational entities at the same time, an extremely controversial move. An administrator, B.T. Shaw, was appointed to head ARS, which now included the four regional research centers. Except for the years 1978-81, when Agricultural Research formed part of a parent organization, the Science and Education Administration, the four labs, along with many other research facilities, have been a part of the Agricultural Research Service.

In 1957, progress at the four centers was reviewed by a Commission on Increased Industrial Use of Agricultural Products. This bipartisan group included four representatives of agribusiness and one agricultural educator. Its staff, which in a report to Congress recommended ways to increase industrial use of farm products, was headed by Wheeler McMillen of *Farm Journal*, the spokesman for the chemurgy movement. The staff also included several USDA research scientists.

The report (Senate Document No. 45, 1957) identified "four main needs" to develop profitable industrial markets for products

using surplus crops. Briefly, they were: (1) a sharper sense of the urgency of the industrial utilization approach; (2) greatly expanded fundamental and applied research; (3) scholarships, grants, etc., to train more scientific talent to work on "the neglected field" of farm product research; and (4) financial incentives for industry to try out and develop new products or processes.

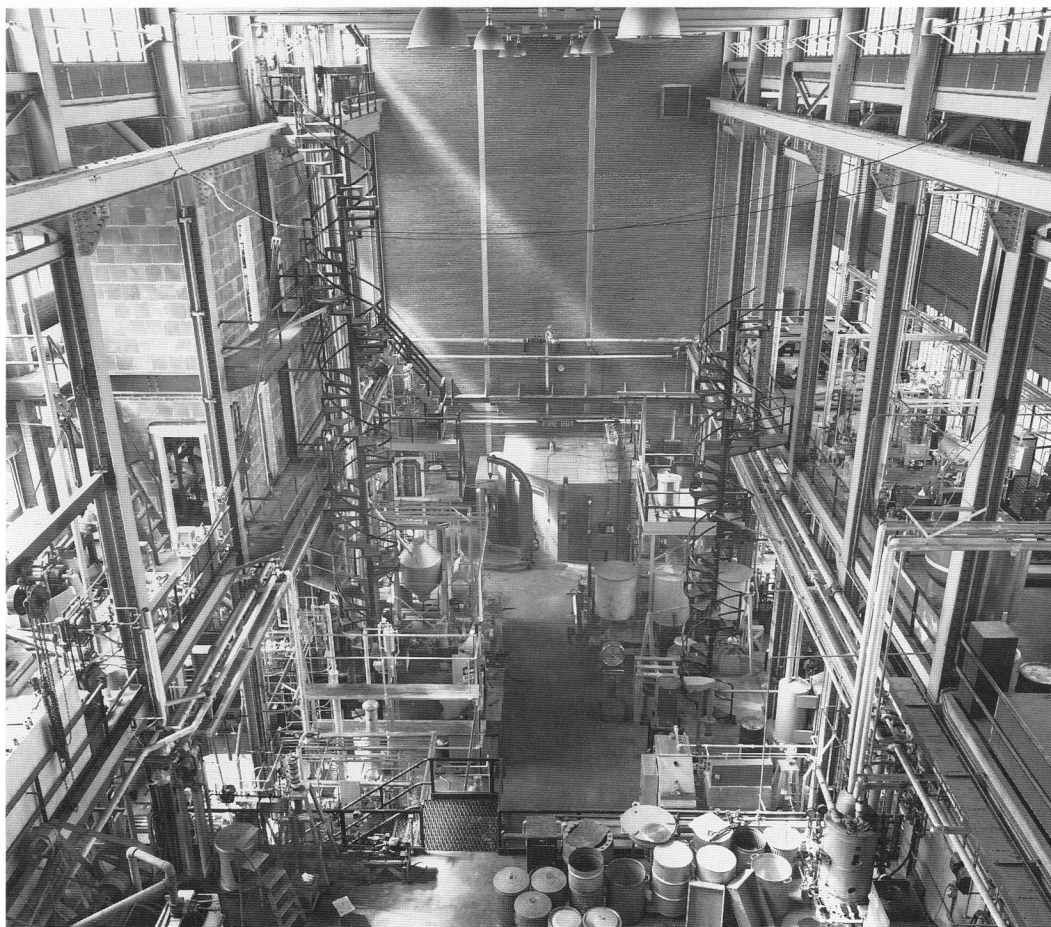
While Congress took no action on most of the Commission's recommendations, its arguments in favor of more fundamental research helped lead, beginning in 1957, to the creation of 16 so-called pioneering laboratories within the Agricultural Research Service. Several of these basic research facilities were located at regional research centers.

In 1960, an intensive appraisal of Federal-State farm research was completed by a Committee on Research Evaluation (CORE). The CORE group was headed by George W. Irving, Jr., then



*Reporting in 1966 on their labs' first 25 years of research were (left to right, back row) R. J. Dimler, NRRC director; C. H. (Hap) Fisher, SRRC director; (seated) Percy Wells, ERRC director; Fred R. Senti, deputy ARS administrator for utilization; and M. J. Copley, WRRC director.*

*Sixteen "pioneering" laboratories were created in 1957 to focus on basic research.*



*The buildings were large enough to permit construction of pilot plants within the walls so that new processes could be tested for feasibility before being adopted by industry.*

head of ARS utilization research and development and later named as the agency's second administrator. Among other things, the CORE report stated that research to develop new crops and to increase efficient utilization of agricultural materials should be expanded more than crop production research. The scientists foresaw continued surpluses, high farm production and marketing costs, and lower farm prices. What was badly needed, they said, were new uses for surplus products and increased farm exports.

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In 1966, ARS conducted a review of accomplishments of the regional laboratories during the first 25 years of their existence. The reviewers found that 109 products and processes had been commercialized. Another 28 showed potential for application, and 26 represented major contributions in basic research. Value of the achievements in the mid-sixties was estimated by ARS leadership at something over \$6 billion—20 times the 309 million dollars spent by the labs during their first 25 years. Then as now, the rate of commercialization of research project exceeded the national norm for all private and public research.

The same 25 years—1941-1966—were examined in a Ph.D. thesis at the University of Georgia, by Harold B. Jones, Jr., of USDA's Economic Research Service. Jones found that 9 percent of the projects undertaken by the regional labs by 1966 had produced an economic return. This figure compared favorably, he said, with returns on food industry research. Jones also estimated that research results had paid off at the rate of 20 to 1 or better, a very satisfactory economic return.

In 1967, a fifth utilization laboratory was added at Athens, Georgia, and the physical plant of the initial four labs underwent improvement. Most extensive was the addition of a third research wing in Peoria, changing the configuration of the NRRC building from a U-shape to a W.

During the 1970's, the international agricultural picture changed abruptly, with serious effect on the work of the regional centers. Disastrous harvests in many parts of the world sharply reduced surpluses worldwide. New national priorities focused on such areas as food safety and control of pollution. Restrictions in the labs on conducting preharvest research were relaxed and researchers carried out more projects in the areas of crop improvement and pest control.

This emphasis continued for several years. A revised program plan set forth by the Agricultural Research Service in 1982 included among its research goals more attention to resource conservation, improved food safety and quality, and more efficient processing, distribution, and marketing of food and agricultural products to users.

As the decade of the nineties began, however, the direction for research in the four centers began to change once again. The appropriation for the Agriculture Department for fiscal year 1990 directed USDA to move toward an annual level of at least \$50 million a year for regional center research on "new nonfood uses for traditional food commodities such as wheat, corn, and soybeans..." After 50 years, the four regional centers were charged once more with research goals almost identical to those in the original 1938 Act. The wheel had come full circle.